

# Notice of Allowability

Application No.

10/550,080

Examiner

Eugenia Wang

Applicant(s)

MOSDALE, RENAUT

Art Unit

1745

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed June 11, 2007.
2. ☒ The allowed claim(s) is/are 1-3 and 6-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 7/31/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the amendment received June 11, 2007:
  - a. Claims 6-15 have been added as per Applicant's wishes. Claims 1-3 and 6-15 are pending.
  - b. The previous objections to the drawings have been withdrawn in light of the amendment.
  - c. The previous objection to the abstract of the disclosure has been withdrawn in light of the amendment.
  - d. The previous objections to the specification have been withdrawn in light of the amendments.
  - e. The previous objections to the claims have been withdrawn in light of the amendments (with the exception of portions of the objections labeled "9i" and "9n" in the previous office action; however, Applicant has given Examiner permission to correct these issues, as entered below).
  - f. The previous 112(2) rejection is withdrawn in light of the amendment.

### ***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Suvahis Bhattacharya on July 31, 2007.

The application has been amended as follows:

a. Amend claim 1 as follows:

"A planar fuel cell comprising: an electrode-membrane-electrode assembly, wherein the membrane includes a fabric having warp fibers, which are continuous insulating fibers of an electrically insulating material and weft fibers comprising of both fibers of the insulating material and fibers of an electrically conducting material in an alternating fashion, so as to form insulating areas and conducting areas, respectively."

b. Amend claim 3 as follow:

"The fuel cell according to claim 1, wherein in the in the fibers in the electrically conducting material are carbon fibers or stainless steel fibers."

c. Amend the paragraph beginning on page 3, line 21 as follows:

"To find a remedy to these drawbacks, a prior art method is disclosed for making an assembly of basic fuel cell components by forming several elementary cells, by depositing on an insulating weft, in several successive steps, different components as suspensions."

***Allowable Subject Matter***

3. Claims 1-3 and 6-15 are allowed.

The following is an examiner's statement of reasons for allowance:

The reasons for allowance for claim 1 has been set for in the previous office action. Since claims 2, 3, and 6-9 are dependent on claim 1, they are allowable for the same reason.

Claim 10 teaches a planar fuel cell with a fabric, where the fabric comprises of warp fibers, which are insulating fibers of an electrically insulating material that are oriented in one direction. The fabric also has weft fibers, which are oriented in a direction substantially perpendicular to the warp fibers. Additionally, the weft fibers comprise of fibers that form a first insulating material area and fibers of an electrically conducting material that form a first conducting area, where the first conducting area and the first insulating area are arranged adjacent to each other in the fabric.

None of the prior art pieces of record teach, suggest, or render obvious the use of a single fabric with conductive and insulating fibers dispersed within this sort of an alternating pattern. The prior art of record (such as US 2004/0071865 and US 5863672) teach layers that connects the electrodes have been drawn to a porous sheet or other solids. Since none of the prior art of record alone or in combination appear to teach, suggest, or render obvious the invention of claim 10, the invention of claim 10 is considered patentable over the prior art of record. Since claims 11-15 are dependent on claim 10, they would be allowable for the same reasons.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugenia Wang whose telephone number is 571-272-4942. The examiner can normally be reached on 7 - 4:30 Mon. - Thurs., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EW

GREGG CANTELMO  
PRIMARY EXAMINER

08 August 2004